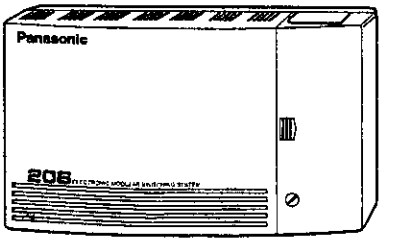
Electronic Modular Switching System

Panasonic

# INSTALLATION MANUAL

*Please read this manual before connecting the Electronic Modular Switching System.*




**MODEL**

**KX-T206NZ**

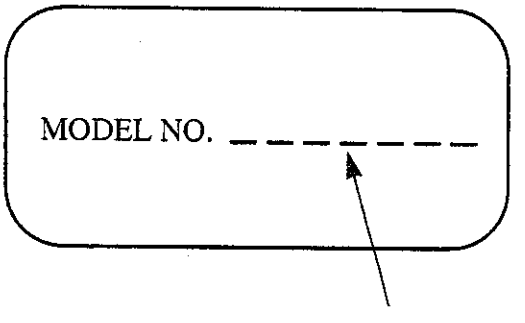
# Thank you for purchasing the Panasonic Model KX-T206, Electronic Modular Switching System.

## System Component

| | Model No. | Description |
|---|---|---|
| Service Unit | KX-T206 | Electronic Modular Switching System |
| Telephone | KX-T7130<br>KX-T7030<br>KX-T7020<br>KX-T7050<br>KX-T7055 | Proprietary telephone with display<br>Proprietary telephone with display<br>Proprietary telephone<br>Proprietary telephone<br>Proprietary telephone |
| Optional Equipment | KX-T20691<br>KX-T30865 | DISA/FAX Detect Card<br>Doorphone |

**Notes**

- This Installation Manual does not show complete model numbers that indicate the country where your models should be used.
  The model number of your unit is found on the label affixed to the unit.




- A proprietary telephone is abbreviated as "PT".
- A single line telephone is abbreviated as "SLT".

# Precaution

- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps, motors and television. These noise sources can interfere with the performance of the Electronic Modular Switching System.
- This unit should be kept free of dust, moisture, high temperature (more than 40°C/104°F) and vibration, and should not be exposed to direct sunlight.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.
- If there is any trouble, disconnect the unit from the telephone line. Plug a telephone directly to the telephone line. If the telephone operates properly, do not reconnect the unit to the line until the trouble has been repaired. If the telephone does not operate properly, chances are that the trouble is in the telephone Network, and not in the unit.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.

**WARNING**

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT, AND RECONNECT THE POWER FIRST.

THIS UNIT IS EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

THE POWER SOCKET WALL OUTLET SHOULD BE LOCATED NEAR THIS EQUIPMENT AND BE EASILY ACCESSIBLE.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR ANY TYPE OF MOISTURE.

WARNING NOTICE

- No "111" or other calls can be made from this device, except from extension 2, during a mains power failure.
- In the event of any problem with this device, it is to be disconnected, and a CPE item connected to one of its terminal ports may be connected directly in its place. The user should then arrange for the product to be repaired. Should the matter be reported to Telecom as a wiring fault, and the fault be proven to be due to this product, a call-out charge will be incurred.

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# Specifications

## *General Descriptions*

| | | | |
|---|---|---|---|
| 1. Capacity | Telephone line | 2 | |
| | Extension | 6 | |
| 2. Control Method | Stored Program CPU: 8 bits CPU<br>Control ROM: 64 KB, Control RAM: 8 KB | | |
| 3. Switching Method | Space Division CMOS Crosspoint Switch | | |
| 4. Power Supplies | Primary | AC 110–240 V, 50/60 Hz | |
| | Secondary | Circuit Volt: +5V, +15 V, +30 V | |
| | Power Failure | CO 2 assigned to extension 22 | |
| 5. Dialing | Outward | Dial Pulse | 10 PPS, 20 PPS |
| | | Tone Dial | |
| | Internal | Dial Pulse | 10 PPS, 20 PPS |
| | | Tone Dial | |
| | Mode Conversion | DP-DTMF, DTMF-DP | |
| 6. Connector | CO | 4-pin connector | |
| | Extension | 4-pin connector | |
| | Doorphone | 4-pin connector | |
| 7. EXT Connection | Cable | 1 pair wire (single line telephone)<br>2 pair wire (proprietary telephone) | |
| 8. Intercom paths | 2 (including the doorphone path) | | |

## *Characteristics*

| | | |
|---|---|---|
| 1. Station Loop Limit | Proprietary telephone | 40 ohms |
| | Single line telephone | 600 ohms including set |
| | Doorphone | 20 ohms |
| 2. Minimum Leak Resistance | 15000 ohms | |
| 3. Maximum Number of Station Instruments per line | 1 (proprietary telephone) or 3 (single line telephone) | |
| 4. Ring Voltage | 90 Vrms at 20 Hz depends on Ringing Load | |
| 5. Primary Power | AC 110–240 V, 50/60 Hz, 0.5 A maximum | |
| 6. Central Office Loop Limit | 1600 ohms maximum | |
| 7. Environmental Requirements | 0–40°C, 10%–90% (Humidity) | |

# Before Installation

Please read the following notes concerning installation and connection before installing the system.

## *Safety Installation Instructions*

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

## *Installation Precautions*

This set is exclusively made for wall mounting only. Avoid installing in the following places. (Doing so may result in malfunction, noise, or discoloration.)

1. In direct sunlight and hot, cold, or humid places. (Temperature range: 0°C-40°C/32°F-104°F)
2. Sulfuric gases produced in areas where there are thermal springs, etc. may damage the equipment or contacts.
3. Places in which shocks or vibrations are frequent or strong.
4. Dusty places, or places where water or oil may come into contact with the unit.
5. Near high-frequency generating devices such as sewing machines or electric welders.
6. On or near computers, telexes, or other office equipment, as well as microwave ovens or air conditioners. (It is preferable not to install in the same room with the above equipment.)
7. Install at least 1.8 m (6 feet) from radios and televisions. (both the main unit and a proprietary telephone)
8. Do not obstruct area around the main unit (for reasons of maintenance and inspection – be especially careful to allow space for cooling above and at the sides of the main unit).

## *Wiring Precautions*

Make sure to keep the following instructions when wiring.

1. Do not wire the telephone cable in parallel with an AC power source, computer, telex, etc. If the cables are run near those wires, shield the cables with metal tubing or use shielded cables and ground the shields.
2. If cables are run on the floor, use protectors or the like to protect the wires where they may be stepped on. Avoid wiring under carpets.
3. Avoid using the same power supply outlet for computers, telexes, and other office equipment. Otherwise, the KX-T206's system operation may be interrupted by the induction noise from such equipment.
4. Please use one pair telephone wire for extension connection of (telephone) equipment such as standard telephones, answering machines, etc., except proprietary telephones (KX-T7130, KX-T7030, KX-T7020, KX-T7050, KX-T7055, etc.).
5. The AC cord must be unplugged during wiring. After all the wirings are completed, plug the AC cord into an AC outlet.
6. Mis-wiring may cause the system to operate improperly.
7. If an extension does not operate properly, disconnect the telephone from the extension line and then connect again, or unplug the AC cord of the system and then on again.
8. The KX-T206 is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
9. Use twisted pair cable for CO line connection.
10. CO lines should be installed with lightning protectors. For details, see pages 15-17.

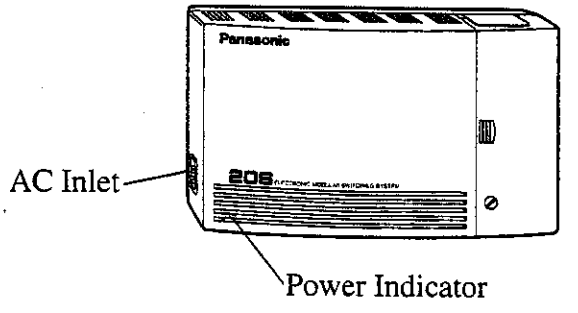
# Unpacking

Unpack the box and check the items below.

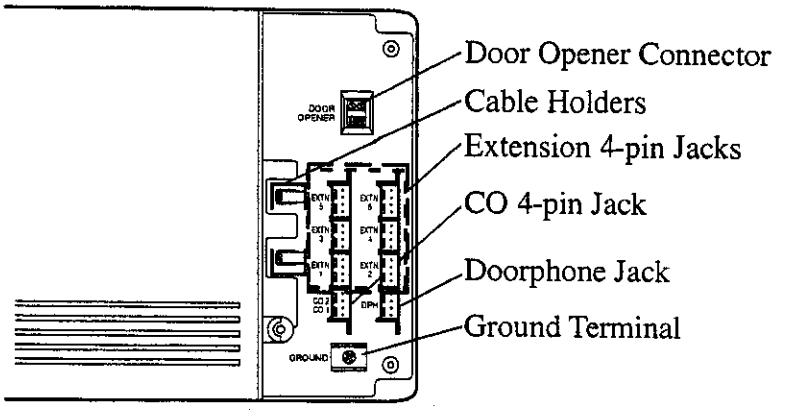
- Main Unit ..... one
- AC Cord ..... one
- Screw and Washer ..... three
- 4-pin Plug ..... eight

# Name and Location

### *Overview of the Main Unit*

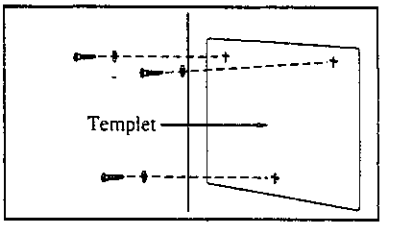



### *Inside View of the Main Unit*

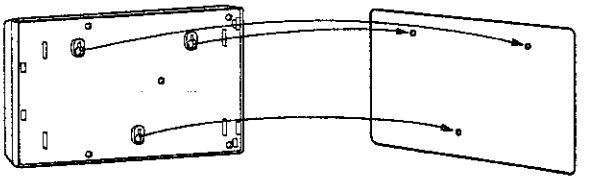


# Wall Mounting

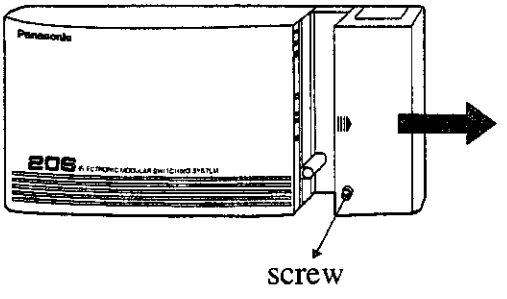
1. Place the template (on page 37) on the wall to mark the three screw positions.




2. Install the three screws and washers (included) into the wall.
3. Hook the main unit on the screw heads.

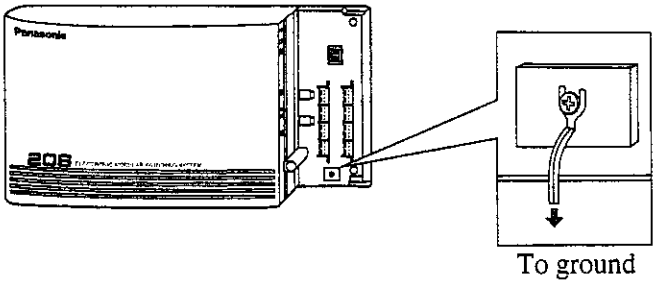


# Opening Front Cover



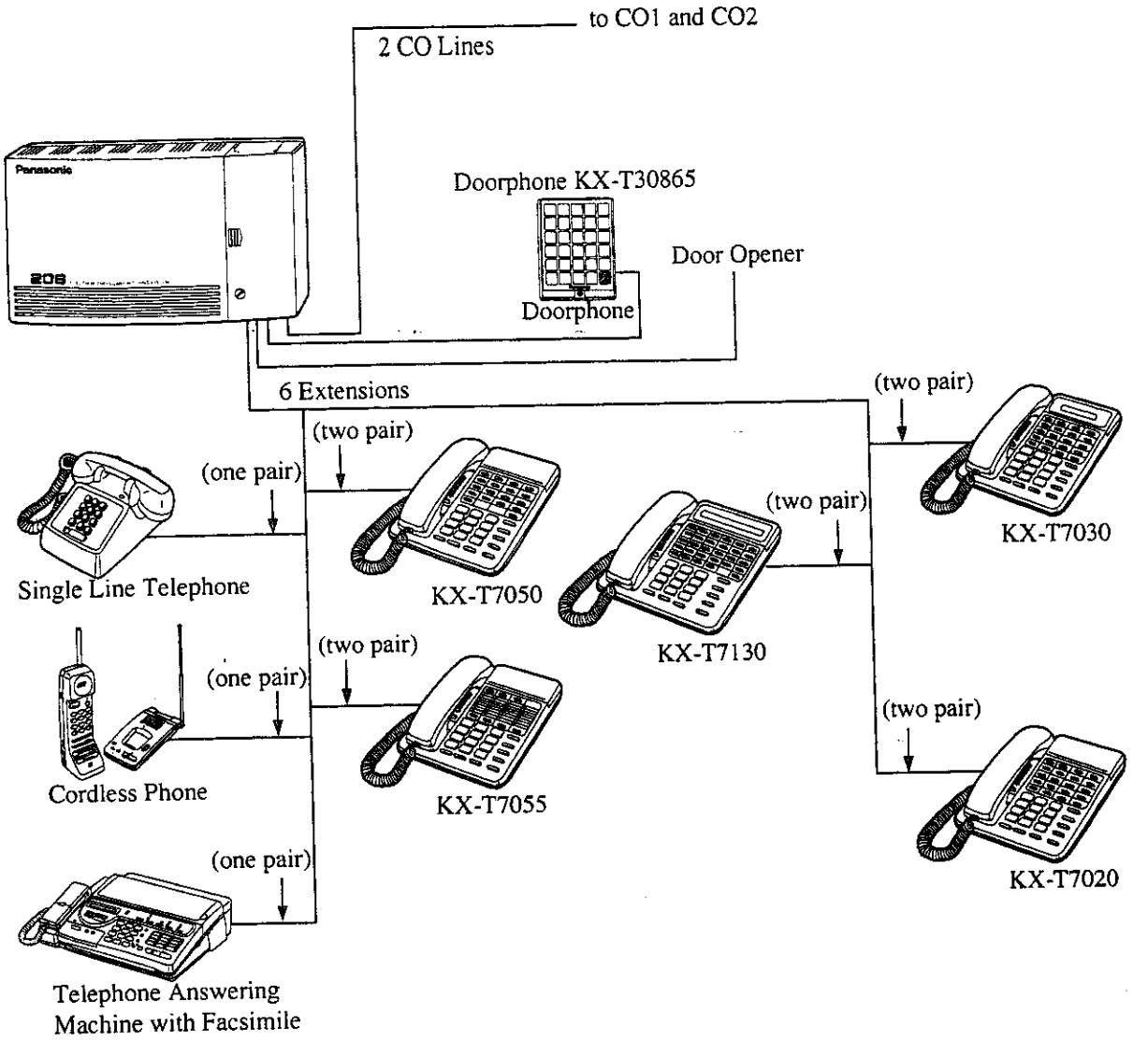

1. Loosen the screw.
2. Slide the cover in the direction of the arrow while pressing the marked position.

# Frame Ground Connection




**IMPORTANT!!!**
Connect the frame of the main unit to ground.

# System Connection Diagram



# CO Line Connection

***Wire Specification***

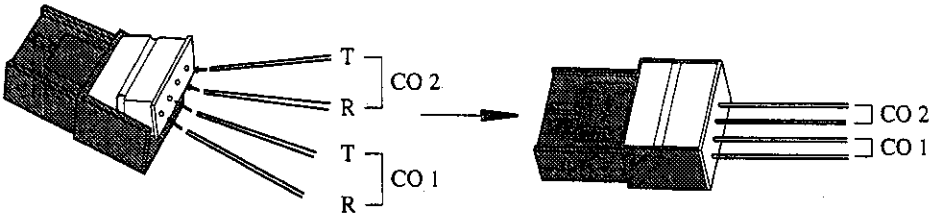
The wire specifications are as follows:

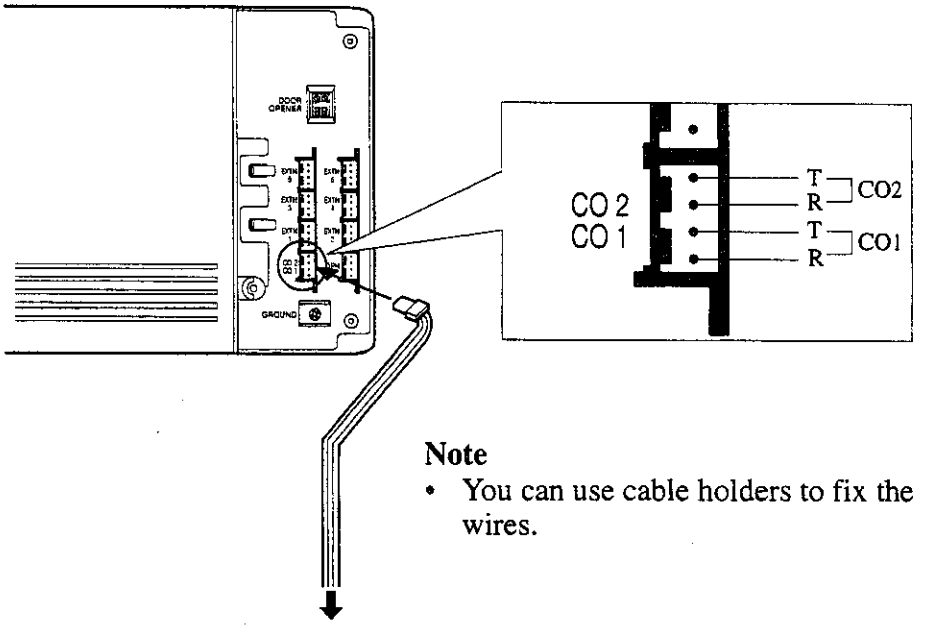
| | |
|---|---|
| ***Wire*** | Solid wire |
| ***Diameter of conductor*** | 0.4 – 0.65mm (22, 24, 26 AWG) |
| ***Diameter with coating*** | 0.66 – 1.05mm |

***Connection***

Use a 4-pin plug (included) to connect CO lines.
A single plug is able to connect two CO lines. Use twisted pair cable.

1. Lift the transparent part.
2. Insert the required telephone wires into the holes of the plug. Then press the transparent part back into the black part.




**Note**

- You can use cable holders to fix the wires.

To Modular Jacks from
the Central Office

**WARNING**

This equipment must not be connected to the fixed wiring unless the connection is via a Telepermitted Line Break-in Arrangement. Any non-Telepermitted connection methods will void the Telecom wiring maintenance agreement.

# Extension Connection

***Wire Specification***

The wire specifications are as follows:

| | |
|---|---|
| ***Wire*** | Solid wire |
| ***Diameter of conductor*** | 0.4 – 0.65mm (22, 24, 26 AWG) |
| ***Diameter with coating*** | 0.66 – 1.05mm |

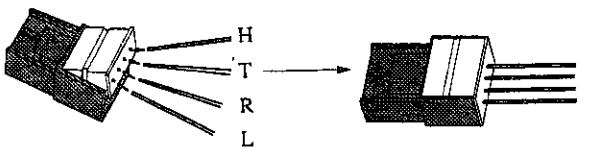
***Connection***

Use a 4-pin plug (included) to connect extension lines.
There are 6 plugs to connect extensions to EXTN. 1 through EXTN. 6 jacks.

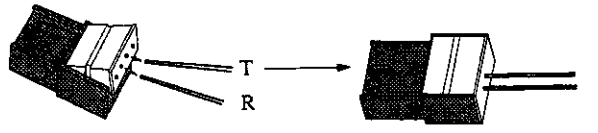
1. Lift the transparent part.
2. Insert the required telephone wires into the holes of the plug. Then press the transparent part back into the black part.

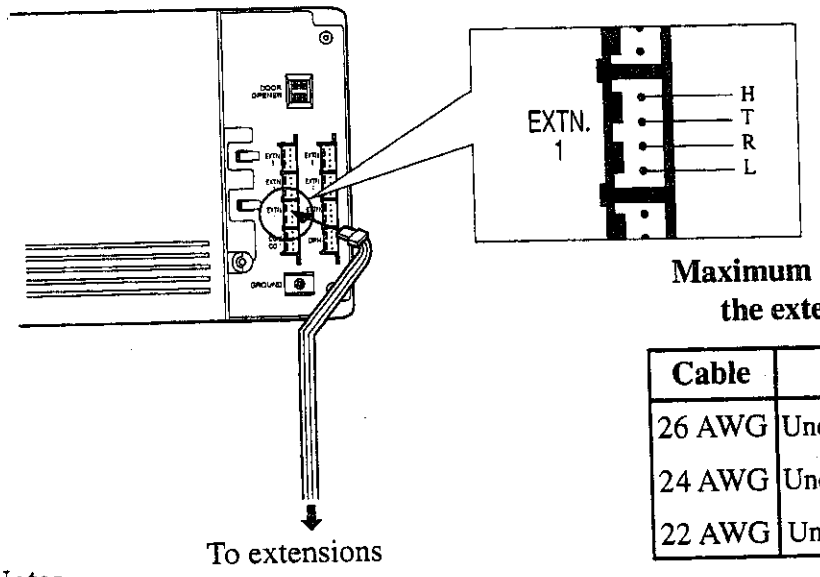
**Note:** Do not strip the wires.
Insert the wires all the way into the plug.

For a proprietary telephone




For single line telephones




To extensions

**Maximum cabling distance of the extension line cord**

| Cable | PT | SLT |
|---|---|---|
| 26 AWG | Under 140 m | Under 698 m |
| 24 AWG | Under 229 m | Under 1128 m |
| 22 AWG | Under 360 m | Under 1798 m |

**Notes**

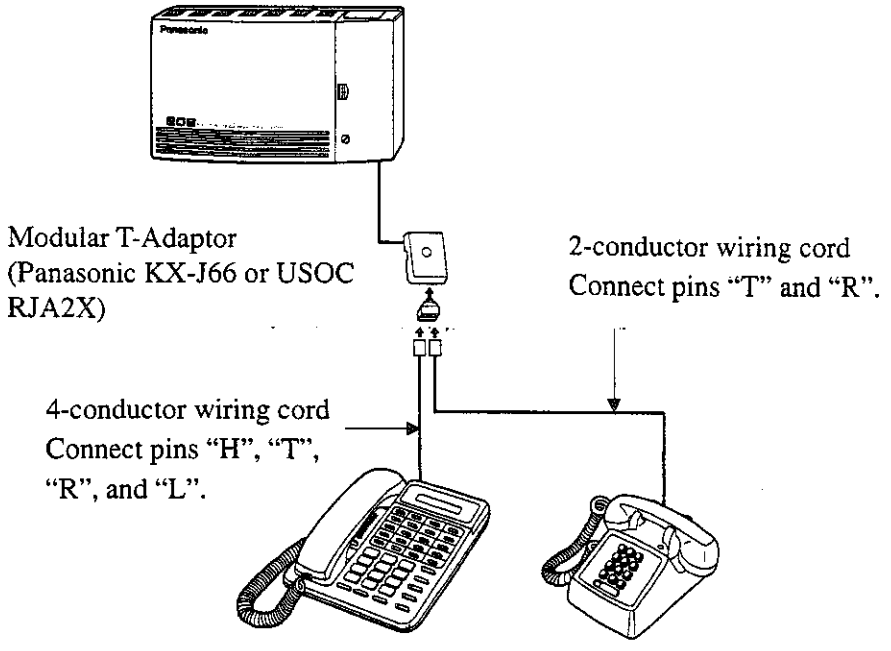
- A proprietary telephone can only be connected to EXTN.1 jack.
- A facsimile must be connected to EXTN.6 jack if an optional DISA/FAX Detect card (KX-T20691) is installed. See page 14 to install the card. System programming is also required. The "#12 Fax Connection" program should be assigned as "ENABLE". See page 23. The "#24 Call Incoming Mode Selection" program should be assigned as "DISA". See page 28.
- The EXTN.1 through EXTN.6 jacks correspond to extension numbers 21 through 26 respectively.
- You can use cable holders to fix the wires.

**WARNING**

Not all telephones will respond to incoming ringing when connected to the extension sockets.

# Paralleled Telephone Connection

Any single line telephone can be connected in parallel with a proprietary telephone.

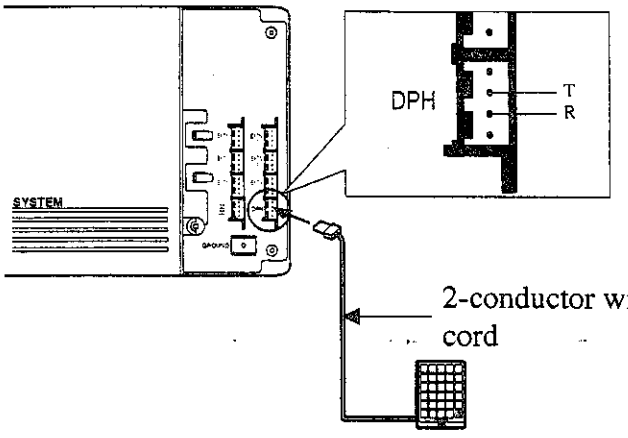



**Notes**

- System programming is required. See "#31 Paralleled Telephone Connection" on page 28.
- The following features are not available for SLT connected in parallel:
  - Call Splitting
  - External Feature Access
  - Conference

# Installation of Optional Card and Unit

## *Doorphone (KX-T30865) Connection*




KX-T30865

**The maximum lengh of the doorphone line**
26 AWG: Under 70 m
24 AWG: Under 113 m
22 AWG: Under 180 m

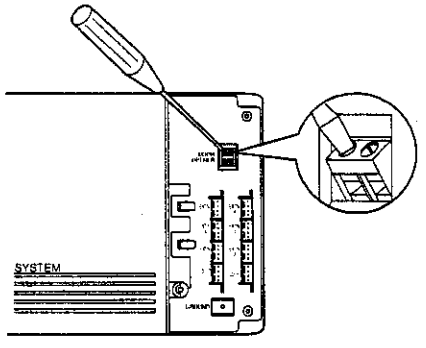
**Notes**

- The doorphone adaptor is not required for KX-T206.
- To avoid howling, you must assign all extensions as "DISABLE" in the "#06/#76 Doorphone Assignment (Day/Night)" program when you do not connect a doorphone.
- If howling occurs while using the doorphone feature, check the wiring.
- You can use cable holders to fix the wires.

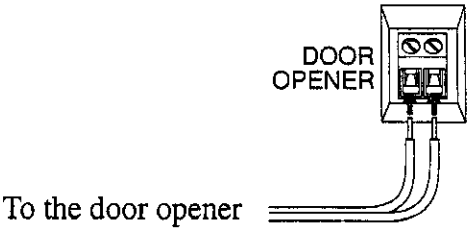
## *Door Opener Connection*

A user-supplied door opener can be connected to the system.

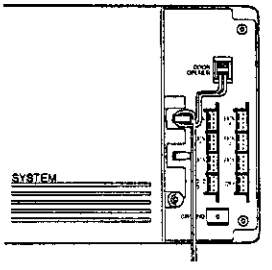
1. Loosen the screws.




2. Insert the wires coming from the door opener into holes and tighten the screws.

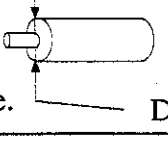



3. Wind and fix the cables of the door opener round the upper cable holder.




**Notes**

- For wiring, it is recommended to use UL1015, AWG 22 twisted wire or the equivalent.
- The maximum length of the door opener line that connects to the main unit is under 180 m.
- The wire should be between 1.2 and 2.4 mm ($^3/_{64}$ and $^3/_{32}$ inch) in diameter including the coating.

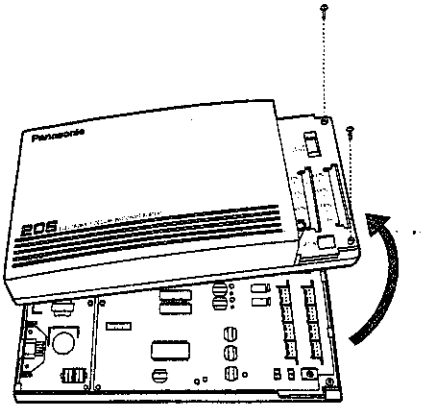



- Set the door opener paired with the doorphone.

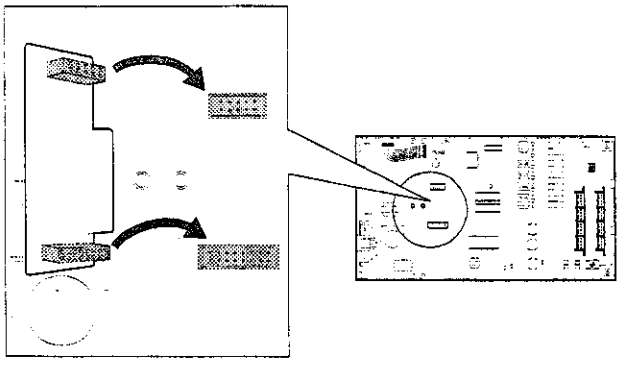
# Installation of Optional Card and Unit

## *DISA Card (KX-T20691) Connection*

1. Disconnect the AC cord from the system.
2. Loosen the screws and remove the cover.



3. Attach the DISA card to the marked connectors.



4. Replace the cover and secure the screws.
5. Connect the AC cord again.

The DISA feature allows an outside caller to have direct access to intercom calls. System programming is required. See "#10 OGM Recording" on page 22 and "#24 Call Incoming Mode Selection" on page 28.

Keep the following conditions in mind:

- When a caller enters the second digit of an extension number (1 through 6) during the message, he/she can reach the extension directly.
- If the call is not received, the assigned extensions will ring if "Enable" is selected in "#42 DISA Rerouting". See page 28.
- If the caller enters 0, the assigned extensions can receive his/her call. See "#04/#74 CO1 Ringing Assignment (Day/Night), "#05/#75 CO2 Ringing Assignment (Day/Night)" on page 20.
- If the caller enters 7, 8 or 9, or enters nothing, extension 21 will receive his/her call.
- Any calls from a rotary phone is received by extension 21 if "ENABLE" is selected in "#41 DISA Receiving Selection". See page 28.

# Installation of Lightning Protectors

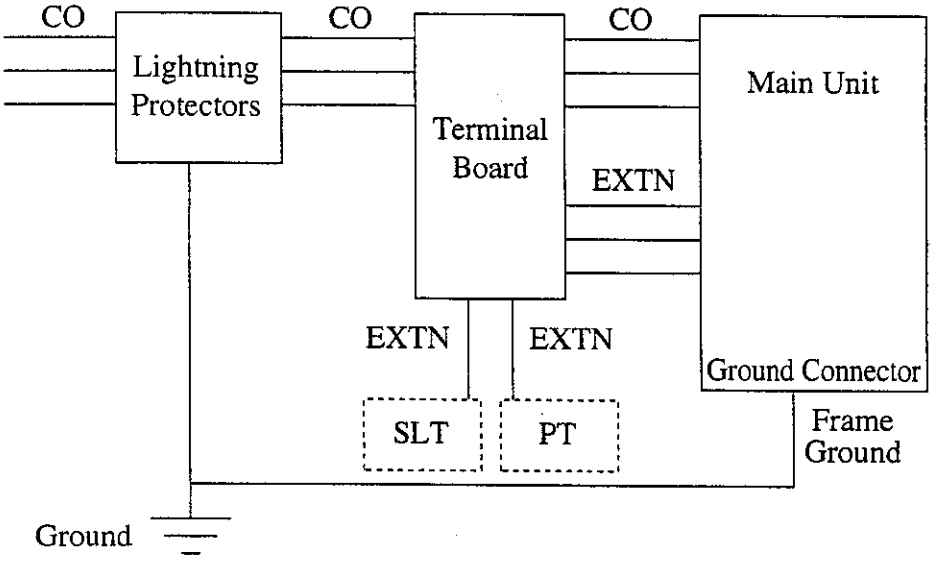
## *Overview*

A lightning protector is a device to be installed on each phone line to reduce the risk of a dangerous surge from entering the building and damaging equipment. A dangerous surge can occur if a telephone line comes in contact with a power line. Trouble due to lightning surges have been showing a steady increase with the development of electronic equipment. In many countries, there are regulations requiring the installation of a lightning protector. A lightning strike to a telephone cable which is 10 m (33 feet) above ground can be as high as 200,000 volts. This system should be installed with lightning protectors. In addition, grounding (connection to earth ground) is very important for the protection of the system.

## *Recommended lightning protector*

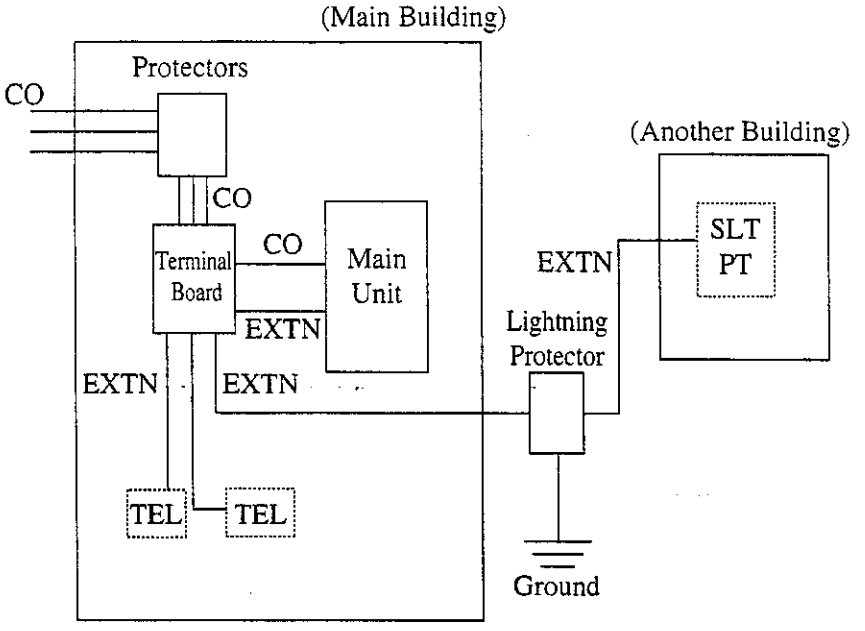
- Panasonic KX-A207

## *Installation*



# Installation of Lightning Protectors

## *Outside*




***Notice***

If you install an extension outside of the main building, the following precautions are recommended:

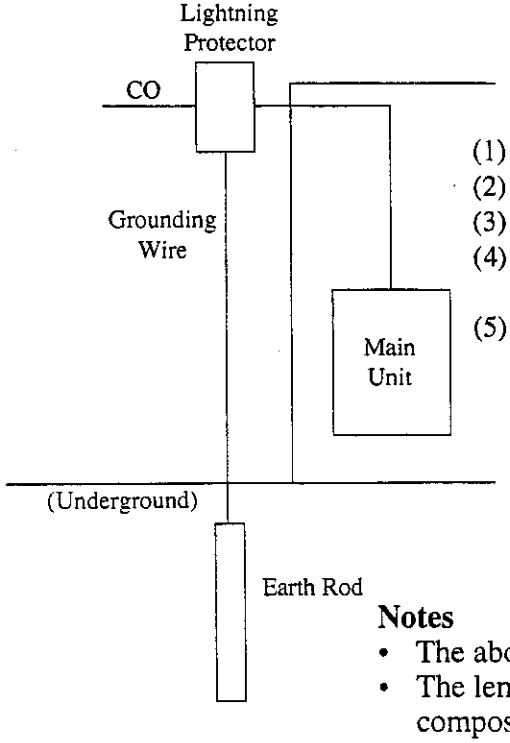
(1) Install the extension wire underground.

(2) Use a conduit to protect the wire.

**Note**

- The lightning protector for an extension is different from that for CO.

## *Installation of an Earth Rod*




(1) Installation location of the earth rod ..... Near the protector
(2) Check obstructions ..... None
(3) Composition of the earth rod ..... Metal
(4) Depth of the earth rod ..... More than 50 cm (20 inches)
(5) Size of the grounding wire ..... Thickness is greater than 16 AWG

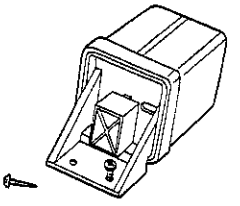
**Notes**

- The above figures are recommendations only.
- The length of earth rod and the required depth depend on the composition of the soil.

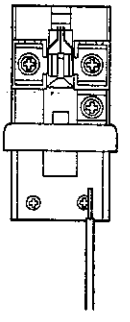
# Installation of Lightning Protectors

### *Installation of the KX-A207*

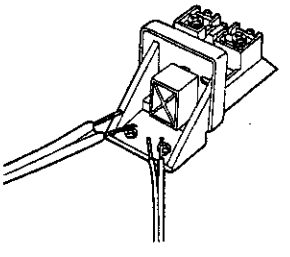
1. Secure the protector to a building with the enclosed mounting screws.



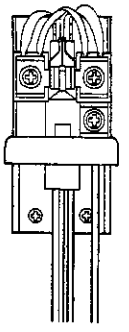
2. Remove about 1 cm ($^{13}/_{32}$ inch) of insulation from the end of the earth wire. Insert the earth wire through the bottom of the protector base and secure it to the earth terminal.



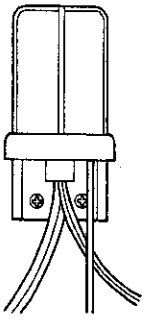
3. Remove about 1.5 cm ($^{19}/_{32}$ inch) of insulation from the ends of the external and internal cables, then pass the cables through the rubber packing.



4. Fold the external and internal cables, and connect them to the terminal screws using washers.



5. Secure the external and internal cables and the earth wire to the building. Then, install the arrester and mount the cover on the protector.



# Power Failure Transfer

In the event of a power failure, CO2 is connected to extension 22 automatically.

**Note**

- The system programmed data is protected by the factory provided lithium battery.

# Starting the System

Plug the AC power cord into the system and an AC outlet.

- The power indicator of the system will light.

# General Programming Instructions

**Default Setting**

This system has a default factory setting. If any of the programming needs to be changed, you can change the setting by system programming.

**Required Telephone Set**

You can use any of the following telephones for system programming:

- Proprietary Telephone (PT): KX-T7130, KX-T7030, KX-T7020, KX-T7050, KX-T7055
- Single Line Telephone (SLT): tone type

All telephones (except KX-T7130 and KX-T7030) do not have display panels, so you cannot check the setting you have made. Therefore, please use KX-T7130 or KX-T7030 to check the programming.

**Extensions Used for Programming**

System programming can only be performed from extension 21.

**To Check the Programmed Data**

Use KX-T7130 or KX-T7030. When you check the assignment, set the MEMORY switch on the PT to "PROGRAM". Enter "#" and the program address.
You cannot check programs #60, #62 through #69, as they are not displayed on the display panel.

**Before Programming**

To enter the system programming mode:

**[Off-hook]** 6 2 0 6 2 0 6 #

Perform System Date Clear (#99) as the first function before programming other features when system is first installed.

**After Programming**

To exit the system programming mode:

**[Off-hook]** 6 2 0 6 #

## System Speed Dialing Number Set

*Description*

Used to program System Speed Dial numbers. These numbers are available to all extension users. There are 80 numbers from 00 through 79.

*Condition*

- A maximum of 32 digit numbers can be stored.
- You must store an automatic line access code (1 or 9), or an individual line code (81 or 82) first. The automatic line access code is assigned in "#52 CO Line Access Number Selection".
- If you store a pause, press ✳.

*Input Format*

[#] [0] [0] **[AA] [Phone No.]** [#]

*Explanation*

- [AA]=Speed dial number: 00 through 79
- Phone number: 32 digits max.

*Default* Not stored

## Dial Type Selection

*Description*

Assigns the Dial Type (tone or pulse) to CO line.

*Input Format*

[#] [0] [1] **[A] [B]**

*Explanation*

- [A]= 1: CO1/ 2: CO2
- [B]= 0: PULSE/ 1: TONE

*Default* Both COs– 1: TONE

## Outgoing Permitted CO1 Assignment (Day/Night)

*Description*

Determines the extensions which can have access to CO line 1 in both day and night modes. The extension users can make outgoing CO calls if their extensions are assigned as "ENABLE".

*Input Format*

[#] [0] [2] **(for day) /** [7] [2] **(for night) [A] [B]**

*Explanation*

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE/ 1: ENABLE

*Default* All extensions– 1: ENABLE

## Outgoing Permitted CO2 Assignment (Day/Night)

*Description*

Determines the extensions which can have access to CO line 2 in both day and night modes. The extension users can make outgoing CO calls if their extensions are assigned as "ENABLE".

*Input Format*

[#] [0] [3] (for day) / [7] [3] (for night) **[A] [B]**

*Explanation*

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE/ 1: ENABLE

*Default* All extensions– 1: ENABLE

## CO1 Ringing Assignment (Day/Night)

*Description*

Assigns the extensions which will ring when a call from CO line 1 is received in both day and night modes.

*Input Format*

[#] [0] [4] (for day) / [7] [4] (for night) **[A] [B]**

*Explanation*

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE (not ring)/ 1: ENABLE (ring)

*Default* extension 21–1: ENABLE other extensions– 0: DISABLE

## CO2 Ringing Assignment (Day/Night)

*Description*

Assigns the extensions which will ring when a call from CO line 2 is received in both day and night modes.

*Input Format*

[#] [0] [5] (for day) / [7] [5] (for night) **[A] [B]**

*Explanation*

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE (not ring)/ 1: ENABLE (ring)

*Default* extension 21–1: ENABLE other extensions– 0: DISABLE

## Doorphone Assignment (Day/Night)

*Description*

Assigns the extensions which will ring when a doorphone call is received and enables to call the doorphone in both day and night modes.

*Condition*

- All extensions must be assigned as "0: DISABLE", if you do not connect a doorphone to the system.

*Input Format*

*Explanation*

[#] [0] [6] (for day) / [7] [6] (for night) **[A] [B]**

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE/ 1: ENABLE

*Default* All extensions– 1: ENABLE

## Toll Restriction (TRS) – Class Assignment (Day/Night)

*Description*

Assigns a Toll Restriction Class to each extension in both day and night modes. The Toll Restriction feature can prohibit certain extension users from placing unauthorized toll calls. The following four classes are available:

| Class | Restricted calls | Excepted calls |
|---|---|---|
| CLASS 1 | None | None |
| CLASS 2 | Numbers programmed in "#08 Denied code (Class 2, 3) " | Numbers programmed in "#17 Excepted code (Class 2, 3)" and "#18 Excepted code (Class 2)" |
| CLASS 3 | Numbers programmed in "#08 Denied code (Class 2, 3) and "#09 Denied code (Class 3)" | Numbers programmed in "#17 Excepted code (Class 2, 3)" |
| CLASS 4 | All CO calls | None |

*Input Format*

*Explanation*

[#] [0] [7] (for day) / [7] [7] (for night) **[A] [B]**

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 1: CLASS 1/ 2: CLASS 2/ 3: CLASS 3/ 4: CLASS 4

*Default* All extensions– 1: CLASS 1

## TRS Denied Code (CLASS 2, 3)

*Description*

Allows you to specify the numbers which are toll-restricted for TRS Class 2 and Class 3.

*Condition*

- The character "＊" can be any number.

*Input Format*

[#] [0] [8] **[A] [Denied code No.]** [#]

*Explanation*

- [A]= Code No.: 0 through 9 1 digit
- Denied code number: 7 digits, ＊

*Default* All codes– Not stored

## TRS Denied Code (CLASS 3)

*Description*

Allows you to specify the numbers which are toll-restricted for TRS Class 3.

*Condition*

- The character "＊" can be any number.

*Input Format*

[#] [0] [9] **[A] [Denied code No.]** [#]

*Explanation*

- [A]= Code No.: 0 through 9 1 digit
- Denied code number: 7 digits, ＊

*Default* All codes– Not stored

## OGM Recording

*Description*

Used to record an outgoing message for Direct Inward System Access (DISA).

*Condition*

- The recording time is a maximum of 16 seconds.
- If you perform programming with a PT, the message "RECORDING" will be displayed on its panel.
- If the DISA/FAX Detect card is not installed, you will hear a reorder tone and the program is finished.

**Message example**: "This is AAA company. Please enter 1 for Mr. AA, 2 for Mr. BB ..... 6 for Ms. FF. Thank you."

*Input Format*

[#] [1] [0] **(Record your message)**

## OGM Play

*Description*

Confirms the outgoing message recorded in the OGM Recording program.

*Condition*

- If you perform programming with a PT, the message "PLAYBACK" will be displayed on its panel.

*Input Format*

## Fax Connection

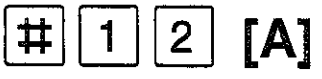
*Description*

Allows the system to detect the CNG tone from a facsimile. If it is set to "ENABLE", extension 26 will receive fax transmission data.

*Condition*

- The optional DISA/FAX Detect card (KX-T20691) should be installed.
- The "#24 Call Incoming Mode Selection" program should be assigned as "DISA".
- Extension 26 should be assigned as "DISABLE" in the "#04/#74 CO1 Ringing Assignment (Day/Night)", "#05/#75 CO2 Ringing Assignment (Day/Night)" and "#06/#76 Doorphone Assignment (Day/Night)" programs.

*Input Format*




*Explanation*

- [A]= 0: DISABLE (not detect)/ 1: ENABLE (detect)

*Default* 0: DISABLE

## CO1 Delayed Ringing Assignment

***Description***

Assigns delayed ringing to extensions when a call from CO line 1 is received.

***Condition***

- The number of delayed rings is assigned by the "#15 Delayed Ringing Count Selection" program.
- This feature is not available for the calls sent by the DISA feature.

***Input Format***

***Explanation***

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE (not delayed)/ 1: ENABLE (delayed)

***Default*** All extensions– 0: DISABLE

## CO2 Delayed Ringing Assignment

***Description***

Assigns delayed ringing to extensions when a call from CO line 2 is received.

***Condition***

- The number of delayed rings is assigned by the "#15 Delayed Ringing Count Selection" program.
- This feature is not available for the calls sent by the DISA feature.

***Input Format***

***Explanation***

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE (not delayed)/ 1: ENABLE (delayed)

***Default*** All extensions– 0: DISABLE

## Delayed Ringing Count Selection

***Description***

Assigns the number of delayed rings that will be sent to the assigned extensions from the CO lines.

***Input Format***

***Explanation***

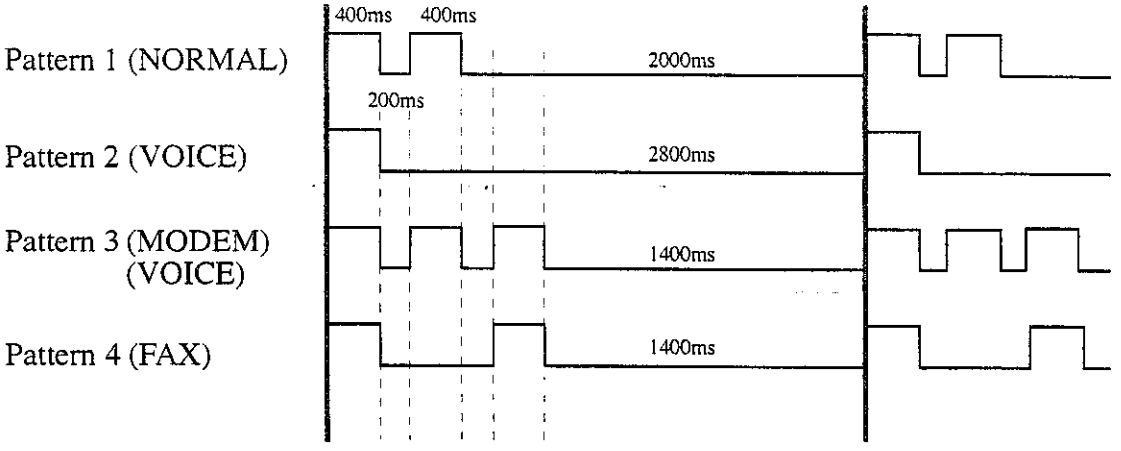
- [A]= 1: After 1 ring/ 2: After 2 rings/ 3: After 3 rings/ 4: After 4 rings

***Default*** 2: After 2 rings

## Detecting the Four Ringing Tone Types

### *Description*

Assigns whether or not to detect the four types of ringing tones from a Central Office. The following four types are available.




When enabled, the extension's ringing patterns are as follows:

- Pattern 1: the extensions which are enabled in the "#04/ #74 CO1 Ringing Assignment (Day/ Night)" and "#05/ #75 CO2 Ringing Assignment (Day/ Night)" will ring with this pattern.
- Pattern 2: only extension 24 will ring with this pattern.
- Pattern 3: only extension 25 will ring with this pattern.
- Pattern 4: only extension 26 will ring with this pattern.

### *Condition*

- When you connect a modem to extension 25 or a facsimile to extension 26, you must set the data line security feature. See page 10 or 19 in the User Manual.

### *Input Format*

[#] [1] [6] **[A]**

### *Explanation*

- [A]= 0: DISABLE (not detect)/ 1: ENABLE (detect)

***Default*** 0: DISABLE

## TRS Excepted Code (CLASS 2, 3)

*Description*

Assigns the numbers which are exceptions to toll restriction for TRS Class 2 and Class 3. You can store a maximum of 10 codes.

*Condition*

- The character "＊" can be any number.

*Input Format* [#] [1] [7] **[A] [Excepted code No.]**

*Explanation*

- [A]= Code No.: 0 through 9 1 digit
- Excepted code number: 7 digits, ＊

*Default* All codes– Not stored

## TRS Excepted Code (CLASS 2)

*Description*

Assigns the numbers which are exceptions to toll restriction for TRS Class 2. You can store a maximum of 10 codes.

*Condition*

- The character "＊" can be any number.

*Input Format* [#] [1] [8] **[A] [Excepted code No.]**

*Explanation*

- [A]= Code No.: 0 through 9 1 digit
- Excepted code number: 7 digits, ＊

*Default* All codes– Not stored

## Door Opener Assignment

*Description*

Assigns whether each extension has access to the door opener or not.

*Input Format* [#] [6] [1] **[A] [B]**

*Explanation*

- [A]= 1 through 6 (corresponding to extension no. 21 through 26)
- [B]= 0: DISABLE/ 1: ENABLE

*Default* All extensions– 1: ENABLE

## Day/Night Switching Mode

*Description*

Assigns automatic or manual day/night mode.

*Condition*

- If automatic switching mode is assigned, day/night mode is switched at the time programmed in "#71 Day/Night Starting Time".

*Input Format*

*Explanation*

- [A]= 0: Manual/ 1: Automatic

*Default* 0: Manual

## Day/Night Starting Time

*Description*

Sets the starting time when automatic day/night mode is programmed in the "#70 Day/ Night Switching Mode" program.

*Input Format*

*Explanation*

- [A]= 1: Day start time / 2: Night start time
- [BB]= Hour: 01-12
- [CC]=Minute: 00-59
- [D]=0: AM / 1: PM

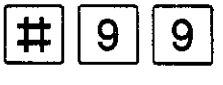
*Default* Day– 9:00 AM Night–5:00 PM

## System Data Clear

*Description*

Allows the system to re-initialize the system-programmed data. The features mentioned in "Station Feature Clear" are also re-initialized. See page 12 of the User Manual. When all the programmed data is cleared, the system will restart with the default setting.

*Input Format*



## *Other Programs*

- **Call Blocking Mode Setting**
  Assigns whether or not to prevent the DTMF signal from being sent to a CO line. This feature is useful when the Central Office in your country accepts both tone and pulse signals or when you access your host PBX with a pulse dial.
  ***Input Format*: #20 [A]**
  • [A]=0: DISABLE (default)/ 1: ENABLE

- **Host PBX Access Code Assignment**
  Assigns a Host PBX access code to make an outside call, if the system is installed behind the host PBX. A pause is automatically inserted after the access code and the toll restriction feature refers to the number after the code.
  ***Input Format*: #21 [A] [code] #**
  • [A]=1: CO1/ 2: CO2
  • [code] = 2 digits max. (Default : Not stored)

- **Hookswitch Flash Time Assignment**
  Sets the time to send the flash signal to each CO line.
  ***Input Format*: #22 [A] [B]**
  • [A]=1: CO1/ 2: CO2
  • [B]=0: 80 ms/ 1: 100 ms / 2: 160 ms/ 3: 300 ms / 4: 600 ms (default)/ 5: 900 ms / 6: 1200 ms

- **CO Pulse Selection**
  Assigns sending the pulse to a CO line during a conversation with an outside party when the "#01 Dial Type Selection" program is assigned as "Pulse".
  ***Input Format*: #23 [A]**
  • [A]=0: DISABLE/ 1: ENABLE (default)

- **Call Incoming Mode Selection**
  Assigns whether to use the DISA feature or not. This program is available when the DISA/FAX Detect card is installed.
  ***Input Format*: #24 [A] [B]**
  • [A]=1: CO1/ 2: CO2
  • [B]=0: NORMAL/ 1: DISA (default)

- **Bell Off Detection**
  Sets the time between one bell signal detection and the next signal from a Central Office.
  ***Input Format*: #25 [A]**
  • [A]=1: 6 SEC (default)/ 2: 3 SEC

- **Intercom Alerting Assignment**
  Assigns the intercom alerting mode to each extension when an intercom call is received.
  ***Input Format*: #30 [A] [B]**
  • [A]=1 through 6 (corresponding to extension no. 21 through 26)
  • [B]=0: TONE (default)/ 1: VOICE

- **Paralleled Telephone Connection**
  Assigns whether each extension will be connected in parallel with a single line telephone or not.
  ***Input Format*: #31 [A] [B]**
  • [A]=1 through 6 (corresponding to extension no. 21 through 26)
  • [B]=0: DISABLE (default)/ 1: ENABLE

- **Executive Busy Override**
  Determines whether each extension performs the Executive Busy Override feature or not.
  ***Input Format*: #32 [A] [B]**
  • [A]=1 through 6 (corresponding to extension no. 21 through 26)
  • [B]=0: DISABLE (default)/ 1: ENABLE

- **Tone Waiting Time After OGM**
  Sets the time between sending an outgoing message and the ringback tone.
  ***Input Format*: #40 [A]**
  • [A]=0: 0 SEC/ 1: 5 SEC (default)/ 2: 10 SEC/ 3: 15 SEC

- **DISA Receiving Selection**
  Assigns whether extension 21 will receive a call sent by the DISA feature or not when a DTMF signal is not detected.
  ***Input Format*: #41 [A]**
  • [A]=0: DISABLE (not receive) / 1:ENABLE (receive) (default)

- **DISA Rerouting**
  Assigns whether to redirect a call sent by the DISA feature or not. If " ENABLE " is selected, a call which is not answered within the time programed by the "#60 DISA Ringing Time Assignment" program is forwarded to extensions which are not assigned as "DISABLE" in the #04/#74 "CO1 Ringing Assignment (Day/Night)" and "#05/#75 CO2 Ringing Assignment (Day/Night)" programs.
  ***Input Format*: #42 [A]**
  • [A]=0: DISABLE (not redirected) / 1:ENABLE (redirected) (default)

- **Hold Recall Time**
  Assigns the length of the hold recall timer and transfer recall timer. The hold recall timer is used to alert an extension that a call has been held for an extended period of time. The transfer recall timer is used to alert an extension that a transferred call has not been answered for an extended period of time.
  ***Input Format*: #50 [A]**
  • [A]=0: 30 SEC (default)/ 1: 1 MIN / 2: 2 MIN/ 3: 3 MIN/ 4: 4 MIN/ 5: DISABLE

## *Other Programs (continued)*

- **Hold Mode Selection for SLT**
  Assigns the method to put a call on hold for SLTs.
  *Input Format*: **#51 [A]**
  • [A]=1: MODE 1 (hooking) (default)
  2: MODE 2 (hooking and dial 6)

- **CO Line Access Number Selection**
  Selects the automatic line access number.
  *Input Format*: **#52 [A]**
  • [A]=1: 9 (default)/ 2: 1

- **Conference Tone**
  Assigns whether or not to delete the conference tone. You will hear the tone when the conference or the executive busy override feature begins and ends.
  *Input Format*: **#53 [A]**
  • [A]=0: DISABLE/ 1: ENABLE (default)

- **Music on Hold Use**
  Selects whether a tone or internal music is used for music on hold.
  *Input Format*: **#54 [A]**
  • [A]=1: MODE 1 (TONE) (default)/
  2: MODE 2 (MUSIC)

- **DISA Ringing Time Assignment**
  Sets the time to forward a call sent by the DISA feature to other extensions. If the call is not answered by the designated extension within the programmed time, the call is forwarded to extensions when "ENABLE" is selected in the #42 DISA Rerouting program. Extensions which are not assigned as "DISABLE" in the #04/#74 CO1 Ringing Assignment (Day/Night) and #05/#75 CO2 Ringing Assignment (Day/Night) programs can receive forwarded calls.
  *Input Format*: **#60 [A]**
  • [A]=1: 10 SEC/2: 20 SEC (default)/ 3: 35 SEC

- **Toll Restriction Code Check**
  Assigns whether "＊" or "#" is to be checked or not when dialed by a user in the Toll Restriction code.
  *Input Format*: **#62 [A]**
  • [A]=0: DISABLE/ 1: ENABLE (default)

- **CO Indicator Assignment**
  Assigns whether an incoming CO call indicates or not on the CO button. Also it allows an extension user to answer the call by pressing the CO button when "DISABLE" is selected in the #04/#74 "CO1 Ringing Assignment" or the #05/#75 "CO2 Ringing Assignment" program.
  *Input Format*: **#63 [A]**
  • [A]=0: DISABLE (The indicator lights red and a user cannot answer the call.)
  1: ENABLE (The indicator is flashing and a user can answer the call.) (default)

- **Pulse Break Ratio Assignment**
  Assigns the pulse break ratio during dial pulsing.
  *Input Format*: **#64 [A]**
  • [A]=1: 66% (default)/ 2: 60%

- **Hookswitch Flash Time Range Assignment**
  Sets the hookswitch flash time range.
  *Input Format*: **#65 [A]**
  • [A]=1: 80–1000ms (default)/ 2: 80–150ms

- **Dial Start Time**
  Sets the time the system waits before dialing after a CO lined is seized.
  *Input Format*: **#66 [A]**
  • [A]=1: 800 ms (default)/ 2: 2000 ms

- **Door Opener Time Assignment**
  Assigns the length of the Door Opener timer. The door is unlocked for the assigned time.
  *Input Format*: **#67 [A]**
  • [A]=1: 1 SEC/ 2: 2 SEC/ 3: 3 SEC/ 4: 4 SEC/ 5: 5 SEC (default)/ 6: 6 SEC/ 7: 7 SEC/ 8: 8 SEC

- **Pulse Speed Selection**
  Sets the pulse speed for CO lines.
  *Input Format*: **#68 [A]**
  • [A]=1: 10 PPS (default)/ 2: 20 PPS

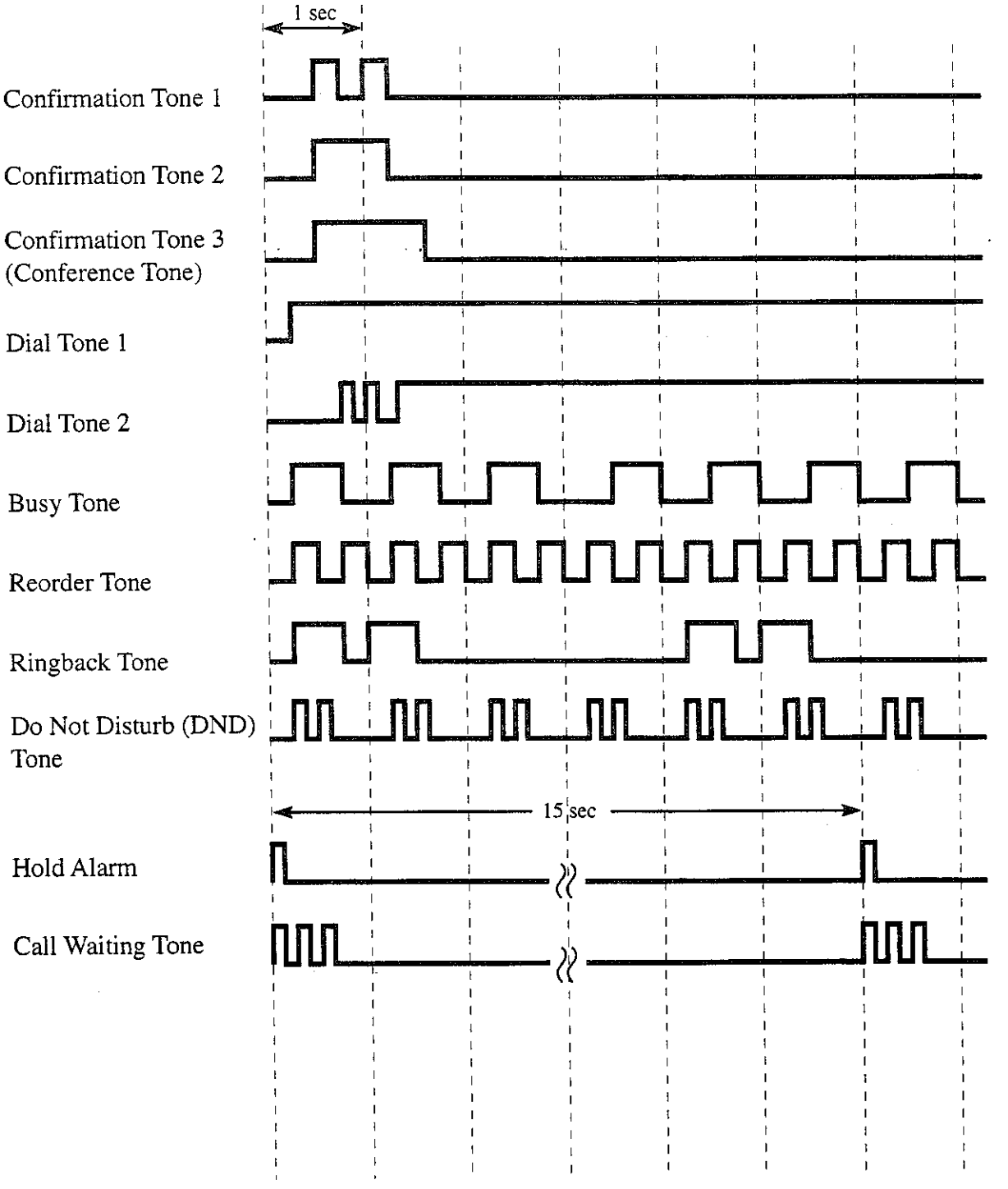
- **CPC Signal Detection**
  Assigns whether the CPC signal is detected or not .
  *Input Format*: **#69 [A] [B]**
  • [A]=1: CO1/ 2: CO2
  • [B]=0: DISABLE/ 1: ENABLE (default)

**Note**

- You cannot check the assignments of programs #60, #62 through #69 by setting the MEMORY switch to "PROGRAM", and entering "#" and the program address, as with other programs.

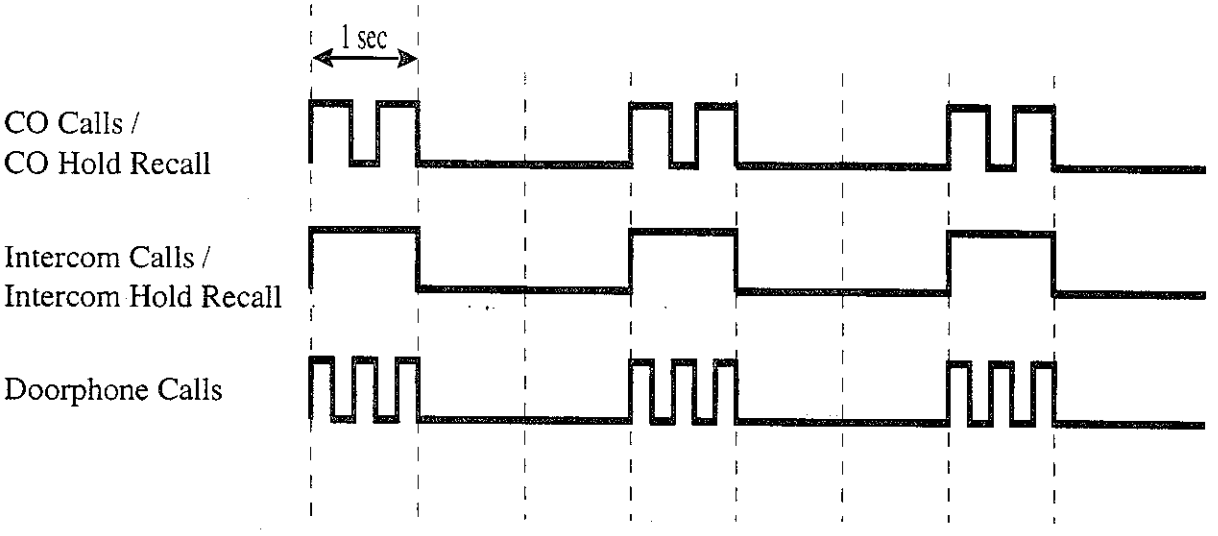
# Tone / Ring Tone

*<Tone>*



# Tone / Ring Tone

*<Ring Tone>*




**NOTE**

- The dial tone 2 is heard during the system programming mode and when the following features are set:
  - Do Not Disturb
  - Call Pickup Deny
  - Call Forwarding
  - Data Line Security

## [#00] System Speed Dialing Number Set

| No. | Name | Phone No. (32 digits max.) |
|---|---|---|
| 00 | | |
| 01 | | |
| 02 | | |
| 03 | | |
| 04 | | |
| 05 | | |
| 06 | | |
| 07 | | |
| 08 | | |
| 09 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| 32 | | |
| 33 | | |
| 34 | | |
| 35 | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 39 | | |

# Programming Tables

| No. | Name | Phone No. (32 digits max.) |
|---|---|---|
| 40 | | |
| 41 | | |
| 42 | | |
| 43 | | |
| 44 | | |
| 45 | | |
| 46 | | |
| 47 | | |
| 48 | | |
| 49 | | |
| 50 | | |
| 51 | | |
| 52 | | |
| 53 | | |
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| 55 | | |
| 56 | | |
| 57 | | |
| 58 | | |
| 59 | | |
| 60 | | |
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| 74 | | |
| 75 | | |
| 76 | | |
| 77 | | |
| 78 | | |
| 79 | | |

# Programming Tables

### [#01] Dial Type Selection

| | Default | CO1 | CO2 |
|---|---|---|---|
| 0: PULSE | | | |
| 1: TONE | ✓ | | |

### [#02] Outgoing Permitted CO 1 Assignment (Day)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#03] Outgoing Permitted CO 2 Assignment (Day)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#04] CO 1 Ringing Assignment (Day)

| | Default | Ext.21 | Default | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | ✓ | | | | | |
| 1: ENABLE | ✓ | | | | | | | |

### [#05] CO 2 Ringing Assignment (Day)

| | Default | Ext.21 | Default | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | ✓ | | | | | |
| 1: ENABLE | ✓ | | | | | | | |

### [#06] Doorphone Assignment (Day)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#07] Toll Restriction (TRS) – Class Assignment (Day)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 1: CLASS 1 | ✓ | | | | | | |
| 2: CLASS 2 | | | | | | | |
| 3: CLASS 3 | | | | | | | |
| 4: CLASS 4 | | | | | | | |

### [#08] TRS Denied Code (CLASS 2, 3)

| Code | Number (7 digits) |
|---|---|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

### [#09] TRS Denied Code (CLASS 3)

| Code | Number (7 digits) |
|---|---|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

### [#16] Detecting the Four Ringing Tone Types

| | Default | Selection |
|---|---|---|
| 0: DISABLE | ✓ | |
| 1: ENABLE | | |

### [#12] Fax Connection

| | Default | Selection |
|---|---|---|
| 0: DISABLE | ✓ | |
| 1: ENABLE | | |

### [#72] Outgoing Permitted CO 1 Assignment (Night)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#73] Outgoing Permitted CO 2 Assignment (Night)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#74] CO 1 Ringing Assignment (Night)

| | Default | Ext.21 | Default | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | ✓ | | | | | |
| 1: ENABLE | ✓ | | | | | | | |

### [#75] CO 2 Ringing Assignment (Night)

| | Default | Ext.21 | Default | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | ✓ | | | | | |
| 1: ENABLE | ✓ | | | | | | | |

### [#76] Doorphone Assignment (Night)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

### [#77] Toll Restriction (TRS) – Class Assignment (Night)

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 1: CLASS 1 | ✓ | | | | | | |
| 2: CLASS 2 | | | | | | | |
| 3: CLASS 3 | | | | | | | |
| 4: CLASS 4 | | | | | | | |

### [#13] CO 1 Delayed Ringing Assignment

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | ✓ | | | | | | |
| 1: ENABLE | | | | | | | |

### [#14] CO 2 Delayed Ringing Assignment

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | ✓ | | | | | | |
| 1: ENABLE | | | | | | | |

### [#15] Delayed Ringing Count Selection

| | Default | Selection |
|---|---|---|
| 1: 1 RING | | |
| 2: 2 RINGS | ✓ | |
| 3: 3 RINGS | | |
| 4: 4 RINGS | | |

# Programming Tables

### [#17] TRS Excepted Code (CLASS 2, 3)

| Code | Number (7 digits) |
|---|---|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

### [#18] TRS Excepted Code (CLASS 2)

| Code | Number (7 digits) |
|---|---|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

### [#70] Day/Night Switching Mode

| | Default | Selection |
|---|---|---|
| 0: MANUAL | ✓ | |
| 1: AUTO | | |

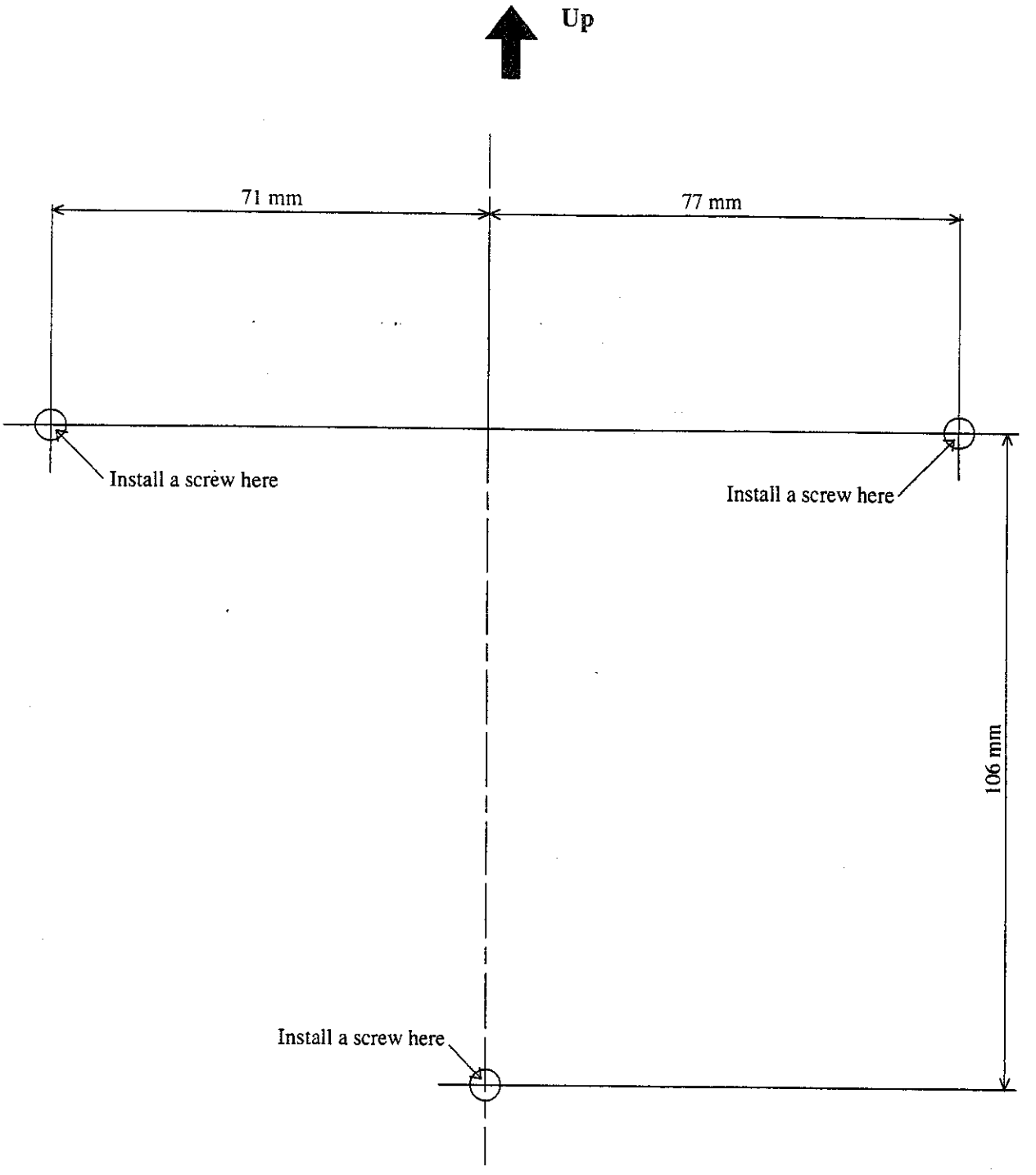
### [#71] Day/Night Starting Time

| | Default | Selection |
|---|---|---|
| 1: DAY | 9:00AM | |
| 2: NIGHT | 5:00PM | |

### [#61] Door Opener Assignment

| | Default | Ext.21 | Ext.22 | Ext.23 | Ext.24 | Ext.25 | Ext.26 |
|---|---|---|---|---|---|---|---|
| 0: DISABLE | | | | | | | |
| 1: ENABLE | ✓ | | | | | | |

# Template




- Copy the templet and place it on the wall.

**When you ship the product**

Carefully pack and send it prepaid, adequately and preferably in the original carton. Attach a postage-paid letter, detailing the symptom, to the outside of the carton. DO NOT send the product to the Executive or Regional Sales offices. They are NOT equipped to make repairs.

**Product service**

Panasonic Servicenters for this product are listed in the servicenter directory. Consult your authorized Panasonic dealer for detailed instructions.

The serial number of this product may be found on the label affixed to the bottom of the unit. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid in identification in the event of theft.

MODEL NO.: **KX-T206NZ**

SERIAL NO.: _____

**For future reference**

DATE OF PURCHASE _____

NAME OF DEALER _____

DEALER'S ADDRESS _____

**Matsushita Electric Industrial Co., Ltd.**
Central P.O. Box 288, Osaka 530-91, Japan

Printed in Japan **PSQX1165ZA** KW0497KM0